

TABLE T1

	Implan-tation	R1	K	A2 × 10 ⁻²	A3 × 10 ⁻³	A4 × 10 ⁻⁴	A5 × 10 ⁻⁵	Figure
Example 1	AC	13.450	-132.085	-0.1734521	0.6588392	-0.7577453	0.3000454	6
Biconvex implant								
Example 2	AC	6.095	-14.103	-0.0003297	0.830998	-1.141028	0.5263252	7
Convex-plane implant								
Example 3	AC	40.000	-3002.10	-0.4500209	0.8996099	-0.9091179	0.3379623	8
Plane-convex implant								
Example 4	PC	12.056	-140.977	-0.1222130	0.5850626	-0.6676928	0.2301316	9
Biconvex implant								
Example 5	PC	5.526	-14.4675	0.0812567	0.933811	-1.468438	0.7497366	10
Convex-plane implant								
Example 6	PC	30.000	-1498.67	-0.5268837	1.219160	-1.408936	0.6006825	11
Plane-convex implant								
Example 7	AC	13.418	-145.681	-0.1241714	0.5080515	-0.6844913	0.3231505	12
Biconvex implant								
Example 8	AC	6.106	-12.8283	-0.0133428	0.7439685	-1.067136	0.5192035	13
Convex-plane implant								
Example 9	AC	40.000	-3921.44	-0.3759112	0.5819191	-0.5171569	0.1652432	14
Plane-convex implant								
Example 10	PC	12.149	-132.152	-0.1261559	0.5283329	-0.7105776	0.3258733	15
Biconvex implant								
Example 11	PC	5.548	-12.5946	0.0382755	0.8435873	-1.344659	0.7089764	16
Convex-plane implant								
Example 12	PC	40.000	-3722.72	-0.5627028	1.135583	-1.357986	0.6273719	17
Plane-convex implant								
Example 13		7.24	-6.90497	0.0355294	0.2450409	-0.2881221	0.1164780	18
Contact lens								

TABLE T2

	Implan-tation	R2	N1	E1	R3	X3	Y3	Figure
Example 1	AC	-14	1.4920	0.78	32.7362	32.7130	-0.8122	6
Binconvex implant								
Example 2	AC	40	1.4920	0.79	7.4785	7.4844	-0.0287	7
Convex-plane implant								
Example 3	AC	-8.047	1.4920	0.78	-20.4506	-20.4528	1.4649	8
Plane-convex implant								
Example 4	PC	-12.5	1.4920	0.78	45.3353	45.2308	-2.3653	9
Biconvex implant								
Example 5	PC	40	1.4920	0.80	6.7762	6.7850	-0.0131	10
Convex-plane implant								
Example 6	PC	-7.555	1.4920	0.78	-17.0687	-17.0671	1.6757	11
Plane-convex implant								
Example 7	AC	-14	1.4920	0.77	75.7360	75.6005	-3.9158	12
Biconvex implant								
Example 8	AC	40	1.4920	0.77	8.5249	8.5068	-0.2525	13
Convex-plane implant								
Example 9	AC	-8.028	1.4920	0.76	-15.2978	-15.3005	1.4775	14
Plane-convex implant								
Example 10	PC	-12.5	1.4920	0.77	124.6802	124.3391	-8.5209	15
Biconvex implant								
Example 11	PC	40	1.4920	0.78	7.6571	7.6465	-0.1999	16
Convex-plane implant								
Example 12	PC	-7.095	1.4920	0.77	-11.3372	-11.3455	1.4363	17
Plane-convex implant								
Example 13		7.7200	1.377	0.22				18
Contact lens								

There is claimed:

1. Sight-correcting optical component having front and rear surfaces at least one of which has a central part in the form of an aspherical surface of revolution with a meridian section satisfying the equation

$$x = \frac{1}{R} \left[\frac{y^2}{1 + \sqrt{1 - (1 + K) y^2/R^2}} \right] + A_2 Y^4 + A_3 Y^6 + A_4 Y^8 + A_5 Y^{10}$$

in which R1, K, A2, A3, A4 and A5 are numerical parameters chosen so that for the optical system comprising said optical component and a specified eye model, minus the crystalline lens if said optical compo-

nent is an intra-ocular implant, they yield for an object proximity P defined by the equation

$$P = N' \cdot \frac{dx'}{f^2}$$

60 in which N' is the refractive index of the image medium, dx' is the longitudinal spherical aberration in the image space and f is the focal length of said eye model, a representative curve which:

for high values of the distance from the axis comprises a substantially straight first section with a slope less than or equal to zero and entirely located between a vertical line passing through a defined reference origin and an oblique line passing